IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
NORTHERN DIVISION

WATERKEEPER ALLIANCE, INC.	*	
	*	
Plaintiff,	*	
	*	
v.	*	
	*	**Civil Action No. 1:10-cv00487-WDQ**
ALAN AND KRISTIN HUDSON FARM, *et al.*	*	
	*	
	*	
Defendants.	*	
	*	

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DECLARATION OF ALEX G. DOLGOS, M.S.

I, Alex G. Dolgos, do hereby declare:

1. I am more than eighteen years old, am competent to testify, and have personal knowledge of the matters stated in this declaration.

2. This declaration is based upon my personal knowledge, expertise and experience, review of various maps and aerial photographs, and public drainage association (PDA) documents, and I have personally inspected the conveyance of drainage from the Hudson Farm under Route 50 to the Franklin Branch downstream through the Deer Run Golf Course. My observations, determinations, and conclusions are detailed in this declaration.

3. I am an independent environmental consultant located in Chestertown, Maryland.

4. I have a Bachelor of Science degree in Wildlife Biology from the Southeastern Oklahoma State University, and a Master of Science degree in Environmental Science from University of Oklahoma.

5. I have more than 30 years of experience working on the Eastern Shore of Maryland

EXHIBIT 081

for the United States Army Corps of Engineers (Corps) on issues related to tidal and non-tidal waters and wetlands. As part of my employment with the Corps I was responsible for making waters of the United States and navigable waters determinations on a multitude of streams, creeks, headwater areas and wetlands throughout this regional area. I have been recognized as an expert in federal courts, including the District of Maryland, on numerous occasions. *See* Attachment A.

6. I have been retained by legal counsel for Waterkeeper Alliance, Inc. as an expert witness to review the presence and direction of the flow of waters from the Hudson Farm to the Franklin Branch to the Pocomoke River located in Worcester County, Maryland. On April 15, 2011, I submitted an expert report that reflects my observations, conclusions and opinions. *See* expert report (without attachments) as Attachment B.

7. I also discussed the above observations and conclusions in a deposition taken by Defendants on May 10, 2011.

8. The Pocomoke River is an interstate and navigable-in-fact river and a major portion of it is subject to the ebb and flow of the tide.

9. The Franklin Branch flows into the Pocomoke River between Massey's and Purnell's crossings, approximately two miles downstream of the point at which Route 50 crosses the Pocomoke River.

10. The Franklin Branch is a primary tributary of the Pocomoke River.

11. Approximately 2.5 miles upstream of its confluence with the Pocomoke River, the Franklin Branch splits into two forks. Each fork originates from separate headwater areas.

12. The Franklin Branch appears on multiple historical maps including United States

Geological Survey (USGS) maps of the Ninepin Branch Quadrangle, the 1973 United States Department of Agriculture (USDA) soil survey map of Worcester County, and the Maryland Department of Planning Tax Map 19. However neither fork was named or labeled on any of these maps as anything other than the Franklin Branch.

13. By the 1960s, a Franklin Branch Public Drainage Association (FBPDA) was established to enhance the flow of the streams in the Franklin Branch drainage area to ensure drainage of surrounding areas, in particular, farm fields.

14. The FBPDA labeled various streams and ditches in the Franklin Branch drainage area as "prongs." This facilitates identifying those sections that need maintenance work in order to maintain the flow.

15. The FBPDA labeled the east fork of the Franklin Branch as "Prong 2." *See* Attachment C, PDA Map.

16. The headwaters of the east fork of the Franklin Branch initiate in the vicinity of Route 346. The Franklin Branch flows in a southwesterly direction paralleling Logtown Road, continues to flow under and parallel to Route 50, and then continues to flow in a southwesterly direction through Deer Run Golf Course to its confluence with the Pocomoke River.

17. The water that flows off the Hudson Farm through Ditch 1 (as identified in Figure 5 of the Bruce Bell expert report, attached hereto as Attachment D) discharges into a drainage ditch on the property of Rayne's Sand and Gravel ("RS&G Drainage Ditch"), and continues to flow underneath Logtown Road and both lanes of Route 50 before re-emerging as an open ditch on the south side of Route 50 where it flows into the Franklin Branch.

18. It is approximately 750 feet from the point where Ditch 1 discharges from the Hudson

Farm property until the flow from that discharge enters the Franklin Branch. *See* Attachment E, Michael A. Scott Plan #5. The total distance from the point where the discharge exits the Hudson Farm to the Pocomoke River is approximately 3.5 miles.

19. On April 1, 2011, I visited the site and observed a slight flow of water in the RS&G Drainage Ditch moving through the culvert under Logtown Road in the direction of Route 50. The flow continued under both the west and east bound lanes of Route 50 and continued to the southwest side of Route 50. At this point I observed flow in the open ditch south of Route 50 flowing towards the Franklin Branch.

20. In the Franklin Branch I observed an obvious flow in a southwesterly direction near its confluence with the open ditch. I also observed floating debris lodged on the upstream side of tree branches in the stream, indicating the southwesterly direction of flow at that location.

21. I next relocated to the point where the stream flows into the Deer Run Golf Course property. At that point, the stream enters into a 36-inch culvert under a fairway for approximately 60 feet and continues downstream. Water in the stream was obviously flowing through the culvert several inches deep, in a southwesterly direction further into the golf course and away from Route 50. An appreciable amount of floating debris was lodged in the upstream end of the culvert by the flow moving through it.

22. I continued to follow the stream to where it flows under the entrance road of the golf course. At that point three 36-inch culverts were placed to handle the flow. I observed water flowing several inches deep through these culverts. Also I observed debris lodged in the upstream end of the culverts. I then followed the stream until it entered another culvert under a fairway and continued to flow further downstream away from the golf course towards the Pocomoke River.

23. On April 8, 2011, I returned to the site along with Michael A. Scott, a licensed surveyor in the State of Maryland. The survey crew transferred a known geodetic elevation from U.S.G.S. Benchmark P-111 located east of the site. The elevations of the culverts under Logtown Road and Route 50 were established in addition to two culverts under private lanes crossing the Franklin Branch and the culverts on Deer Run Golf Course. The stream bottom, top of stream bank, and water level elevations of the stream, along this entire stretch of the stream were also established as part of the survey.

24. The elevations of the stream bottom determined by the surveyor range from 24.18 feet at the confluence of the open ditch and the Franklin Branch to 23.65 feet at the point the stream reached the edge of the golf course property, resulting in a fall of 0.53 feet. The stream bottom elevations between these two points remain fairly consistent. *See* Attachment F, Michael A. Scott Plan #1.

25. The water level elevations determined by the surveyor showed an elevation fall of 0.52 feet from the confluence of the open ditch south of Route 50 and the Franklin Branch to the portion of the stream as it reached the edge of the golf course. The water level elevations continued to fall another 3.81 feet by the time the stream exited the golf course. *See* Attachment G, Michael A. Scott Plan #3 and Attachment H, Michael A. Scott Plan #4.

26. The elevations of the inverts of the culverts in the stream are very similar to the stream bottom elevations and do not create any significant obstructions to the flow of the stream. *See* Attachment I, Michael A. Scott Plan #2.

27. As I observed on my April 1, 2011 site visit, on April 8, 2011 I again observed flow in a downstream direction in the stream from Route 50 through Deer Run Golf Course toward the

Pocomoke River.

28. I took photos of the site on both April 1, 2011 and April 8, 2011 that illustrate the above-referenced statements. *See* Attachment J (Alex Dolgos photos from April 1, 2011) and Attachment K (Alex Dolgos photos from April 8, 2011).

29. I returned to the area on April 24 and May 1, 2011 and again observed flow in the stream.

30. Based on my years of experience, my personal observations and measurements taken by the licensed surveyor, it is my professional opinion, to a reasonable degree of scientific certainty, that:

a. The water in Ditch 1 leaving the Hudson Farm that discharges into the RS&G Drainage Ditch flows freely south under Route 50 into the Franklin Branch which continues to flow freely downstream through the Deer Run Golf Course towards the Pocomoke River.

b. There is no geodetic high point in the stream bottom that would prevent flow from continuing downstream.

c. None of the culverts placed in the stream are able to cause an obstruction of flow in the stream due to their invert elevations.

d. The water surface levels observed and measured in the stream, even at a time when rainfall in this area was below normal, clearly demonstrate that the stream flows unobstructed in the traditional downstream direction to the

southwest.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 13, 2011.

Alex G. Dolgos, M.S.

Alex G. Dolgos, M.S.
8214 Whispering Pines Lane
Chestertown, MD 21620
410-708-6545

Education: Bachelor of Science (Wildlife Biology)
Southern Eastern Oklahoma State University (1970)

Masters of Science (Environmental Science)
University of Oklahoma (1973)

Numerous continuing professional education courses related to wetland delineations, wetland soils and hydrology, and aerial photo interpretation.

Experience:

Alex Dolgos Consulting, Chestertown, MD
2005 – present - Consultant

- Assist clients with permit applications for work in areas impacting tidal and non-tidal wetlands and waterways, including making jurisdictional determinations.
- Design and oversee restoration and mitigation efforts in non-tidal wetlands.

U.S. Army Corps of Engineers, Enforcement Section, Baltimore, MD
1974 – 2005 - Ecologist

- Enforced United States Army Corps of Engineers regulatory programs across the Eastern Shore of Maryland; assisted with enforcement in other areas of the State on an as needed basis.
- Made numerous jurisdictional determinations as to boundaries of waters of the United States and Navigable Waters.
- Determined compliance with Clean Water Act §404 wetlands permits as well as the Rivers and Harbors Act.
- Investigated unauthorized activities regulated by the Clean Water Act, §404 and the Rivers and Harbor Act, and prescribed remedial action to be taken to resolve the violations.
- Designed and supervised the restoration or mitigation of these areas on hundreds of acres of wetlands throughout the Chesapeake Bay area.
- Managed relationships between federal, state, and local government agencies and their statutes, regulations, and policies related to wetlands and water issues.
- Coordinated with the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, and the National Marine Fisheries Service in the enforcement and implementation of the Clean Water Act and the Rivers and Harbors Act.
- Testified as both fact and expert witness on numerous occasions. Qualified as an expert in federal district courts in the fields of wetlands ecology, aerial photo interpretation, wetland restoration and tides.

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LIST OF SELECTED DEPOSITION AND TRIAL TESTIMONY

CASE	COURT	ACTION	YEAR
United States v. Bradshaw	United States District Court for the District of Maryland	Civ. No. JH-79-2118	1981
United States v. Tull, (Edward L. and Louise A.)	United States District Court for the Eastern District of Virginia	CA-85-649/2:85-cv-00649-JAM	1983
United States v. Tull , (Edward L. and Louise A.)	United States District Court for the Eastern District of Virginia	CA-85-380/2:85-cv-00380-JAM	1983
United States v. Tull , (Edward L. and Louise A.)	United States District Court for the Eastern District of Virginia	CA 81-688-N.	1983
United States v. Ellen	United States District Court for the District of Maryland	Crim. No. S-90-0215	1990
United States v. Ellwood	United States District Court for the District of Maryland	Case number not available.	1990
United States v. Strandquist	United States District Court for the District of Maryland	CR-91-297/1:91-cr-00297-FNS	1991
United States v. Deaton	United States District Court for the District of Maryland	CA-95-2140/1:95-cv-02140-MJG	1995
United States v. Wilson	United States District Court for the District of Maryland	Crim No. AW-95-0390	1995
Broadwater Farms Joint Venture v. United States	United State Court of Federal Claims	No. 94-1041 L.	1996

ALEX G. DOLGOS
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I have been retained by legal counsel for the Waterkeeper Alliance, Inc. to review and evaluate Section 5 (Mapping the Local Watershed) of the March 29, 2011 expert report of Damian V. Preziosi, of Integral Consulting Inc., concerning the flow of waters of the Franklin Branch of the Pocomoke River located in Worcester County, Maryland.

I have more than 30 years of experience working on the Eastern Shore of Maryland for the U.S. Army Corps of Engineers (Corps) on issues relating to tidal and non-tidal waters and wetlands. As part of my employment with the Corps I was responsible for making waters of the United States and Navigable waters determinations on a multitude of headwaters, streams, and wetlands, through this regional area. (See resume, Attachment A).

In connection with this project, I reviewed various maps, including U.S. Geological Survey Topographical maps as well as aerial photographs, and I have personally inspected the conveyance of drainage from the Hudson Farm under Route 50 and into the head waters of Franklin Branch downstream through the Deer Run Golf Course. My observations, determinations and conclusions are detailed in this report.

As is illustrated by the Franklin Branch PDA and USGS topographic maps, Franklin Branch splits into two branches. The PDA has designated them a Prong #1 and Prong #2 (See PDA map, Attachment B). The Hudson Farm is located near Prong #2 (See Plan #5, Attachment D). The headwaters on Prong #2 initiate at Route 346, drain in a southwesterly direction paralleling Logtown Road, flows under and parallels Route 50 and continues to flow in a southwesterly direction through Deer Run Golf Course to its confluence with the main Franklin Branch and downstream to the Pocomoke River.

On April 1, 2011, I visited the site and observed a slight flow of water moving through the culvert under Logtown Road at Raynes Sand and Gravel in the direction of Route 50. The flow continued under Route 50, both west and east bound lanes and discharged into what is labeled as ditch 20 on figure 10 (page 38) of the Preziosi report (See Attachment C). I observed flow in ditch 20 in a southerly direction towards Franklin Branch which is labeled as ditch 21 on figure 10. At the confluence of ditch 20 and 21, I observed an obvious flow in Franklin Branch (ditch 21) in a southwesterly direction. Floating debris was also observed lodged on the upstream side of tree branches in the stream, also indicating the direction of flow at that location.

I next relocated to the point where the stream (Franklin Branch) enters Deer Run Golf Course. At that point, the stream enters into a 36 inch culvert under a fairway for approximately 60 feet and continues downstream. Water in the stream was obviously

flowing through the culvert several inches deep, in a southwesterly direction further into the golf course and away from Route 50. An appreciable amount of floating debris was lodged in the upstream end of the culvert by the flow moving through it. I continued to follow the stream to where it flows under the entrance road of the golf course. At that point three 36" culverts were placed to handle the flow. Water was flowing several inches deep through the culverts. Also debris was lodged in the upstream end of the culverts. I then followed the stream until it entered another culvert under a fairway and continued to flow further downstream away from the golf course towards the Pocomoke River.

Based on my observations, I determined that Mr. Preziosi's conclusions and opinions as to direction of flow were inaccurate and that his elevation data was not consistent with my visual observations. Based on my years of experience, I recommended that a survey of the area be completed to more fully evaluate the accuracy of the elevations in Mr. Preziosi's report.

On April 8, 2011, I returned to the site along with Michael A. Scott[1], a licensed surveyor in the State of Maryland. The survey crew transferred a known geodetic elevation from U.S.G.S. Benchmark P-111 located east of the site. The elevations of the culverts under Logtown Road and Route 50 were established in addition to two culverts under private lanes crossing Franklin Branch and the culverts on Deer Run Golf Course. The stream bottom, top of stream bank and water level elevations of the stream, along this entire stretch of the stream were also established as part of the survey. The information obtained by the survey is depicted on the plans (See Attachment D). As observed during my previous site visit, stream flow in a downstream direction was once again clearly observed along the stream from Route 50 through Deer Run Golf Course toward the Pocomoke River.

The Preziosi report, figure 10 indicates that the stream bottom elevations varied from 24 feet at the confluence of ditch 20 and ditch 21, to 37 feet just prior to the golf course, indicating an elevation rise of 13 feet.

The actual elevations of the stream bottom determined by the surveyor range from 24.18 feet at the above-referenced confluence, to 24.05 feet just prior to the golf course, resulting in a fall of 0.13 feet. The stream bottom elevations between these two points remained fairly consistent, only varying less than one foot (See Plan #1, Attachment D).

Mr. Preziosi also reports on figure 10 that the top of the stream bank elevations between the same two points varied from 35 feet to 50 feet, showing a 15 foot rise in elevation from near Route 50 to the golf course.

The actual elevations of the top of the stream bank established by the surveyor vary from 28.58 feet to 30.66 feet at the highest. A rise of only 2.08 feet (See Plan #1, Attachment D). The elevations of the inverts of the culverts in the stream are very similar to the

[1] Note: Michael A. Scott is a Licensed Surveyor in the state of Maryland, and has been for 22 years and has over 35 years experience surveying on the Eastern Shore of Maryland. His state license number is 528. His report is attached at Attachment D.

stream bottom elevations and do not create any significant obstructions to flow of the stream. (See Plan #2, Attachment D).

Mr. Preziosi did not report any water level elevations. The actual water elevations determined by the surveyor showed an elevation fall of 0.52 feet from the confluence of the ditch and stream, downstream to the golf course and continued to fall downstream (see Plans #3 & 4, Attachment D).

The above-referenced inaccuracies in Mr. Preziosi's report are further illustrated by the attached photos of the site. (See Attachment E).

Based on my years of experience, my personal observations and measurements taken by the licensed surveyor, it is my professional opinion, to a reasonable degree of scientific certainty, that:

1. The elevations presented in the Preziosi report are inaccurate and do not reflect actual geodetic elevations.
2. There is no geodetic high point in the stream bottom that would prevent flow from continuing downstream as reported by Mr. Preziosi.
3. None of the culverts placed in the stream are able to cause an obstruction of flow in the stream due to their invert elevations.
4. The water surface levels observed and measured in the stream, even at a time when rain fall in this area was below normal, clearly demonstrate that the stream flows unobstructed in the traditional downstream direction to the southwest.
5. The water in the ditches leaving the Hudson Farm that discharges into the Raynes Sand and Gravel surface drainage area flows freely south under Route 50 into the Franklin Branch which continues to flow freely downstream through the Deer Run Golf Course towards the Pocomoke River.

The assertions in the Preziosi report that portions of the stream are topographically isolated and cannot flow downstream are unfounded and have no apparent factual or scientific merit.

Alex G. Dolgos

4/15/11
Date

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DOCUMENTS CONSIDERED

in April 15, 2011 Expert Report of Alex G. Dolgos
Waterkeeper Alliance, Inc. v. Alan & Kristin Hudson Farm, et al.

Date	Title
	Google Earth Images
	Google Earth Image with GIS Tax Ditch Data from the Eastern Shore Regional GIS Cooperative
	Map of Franklin Branch PDA, Maryland Department of Agriculture
1982	Ninepin Branch Quadrangle, United States Geological Survey, 7.5 Minute Series Topographic Orthophotomap
1992	Maryland Department of Planning Tax Map 19 (Revised Mar. 2010)
3/29/2011	Expert Report of Damian V. Preziosi, M.S., CSE, Waterkeeper Alliance, Inc. v. Alan & Kristin Hudson Farm and Perdue Farms Inc.
4/15/2011	Expert Report of Michael A. Scott, licensed surveyor, Waterkeeper Alliance, Inc. v. Alan & Kristin Hudson Farm and Perdue Farms Inc.

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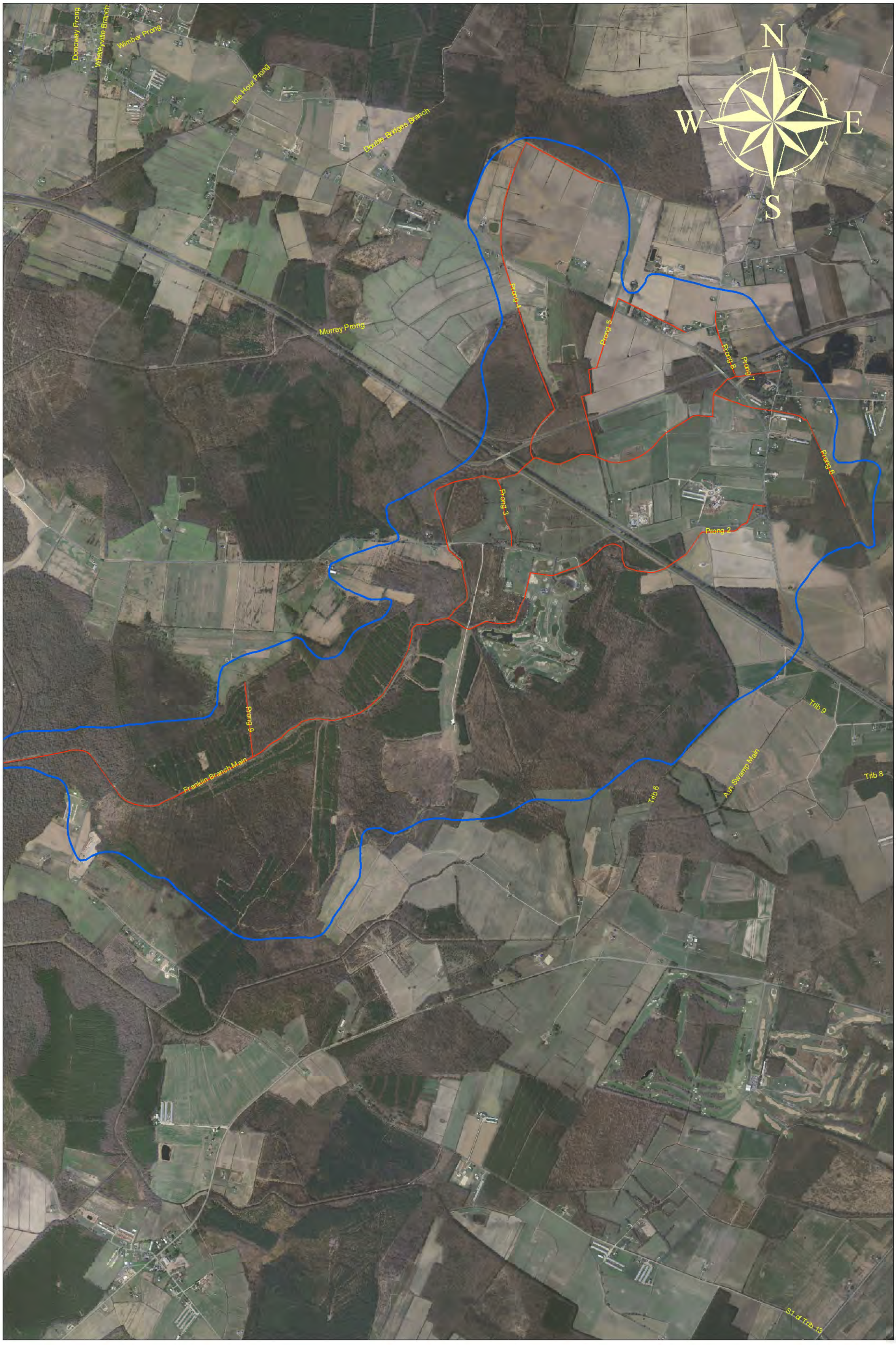
RATES

Field Work is billed at $100 an hour plus expenses.

Deposition and Trial Testimony is billed at $150 an hour plus expenses.

Franklin Branch PDA



Imagery Source: (c) 2010 Microsoft Corporation and its data suppliers

N
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Legend

Ditch/Swale

- Ditch 1
- Swale 2
- Ditch 3
- Ditch 4
- Ditch 5
- Ditch 6
- Ditch 7
- Ditch 8
- Culvert Under Rd.
- Farm Boundary

Ditch/Swale Locations & Flow Directions

Hudson Farm
Berlin, Maryland

Figure 5

CEA #21038

0 300 600 1,200 Feet

CARPENTER ENVIRONMENTAL ASSOCIATES, Inc.
CEA ENGINEERS, P.C.

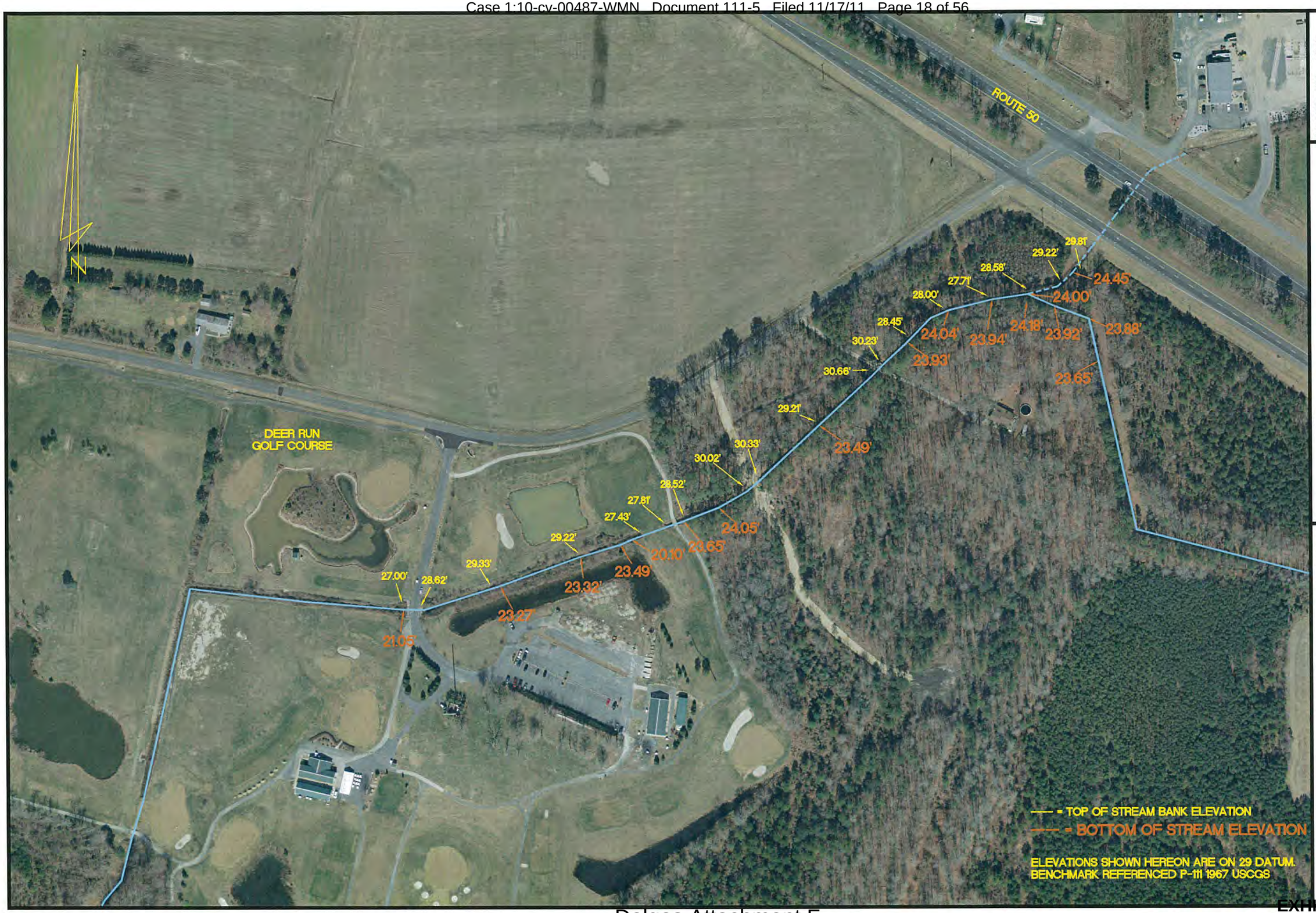
EXHIBIT 081

DRAWN BY DFS
SCALE 1"=400'
DATE 4/8/11
JOB NO.
FOLDER

MICHAEL A SCOTT INC.
207 MAPLE AVENUE CHESTERTOWN, MD 21620 (410)778-2310

OVERVIEW OF AREA
ALONG
FRANKLIN BRANCH
WORCESTER COUNTY
PLAN #5

EXHIBIT 081



DRAWN BY DFS
SCALE 1"=200'
DATE 4/8/11
JOB NO.
FOLDER

MICHAEL SCOTT INC.
207 MAPLE AVENUE CHESTERTOWN, MD 21620 (410)778-2310

BOTTOM OF STREAM & TOP OF BANK ELEVATIONS
ALONG
FRANKLIN BRANCH
WORCESTER COUNTY
PLAN #1

EXHIBIT 081

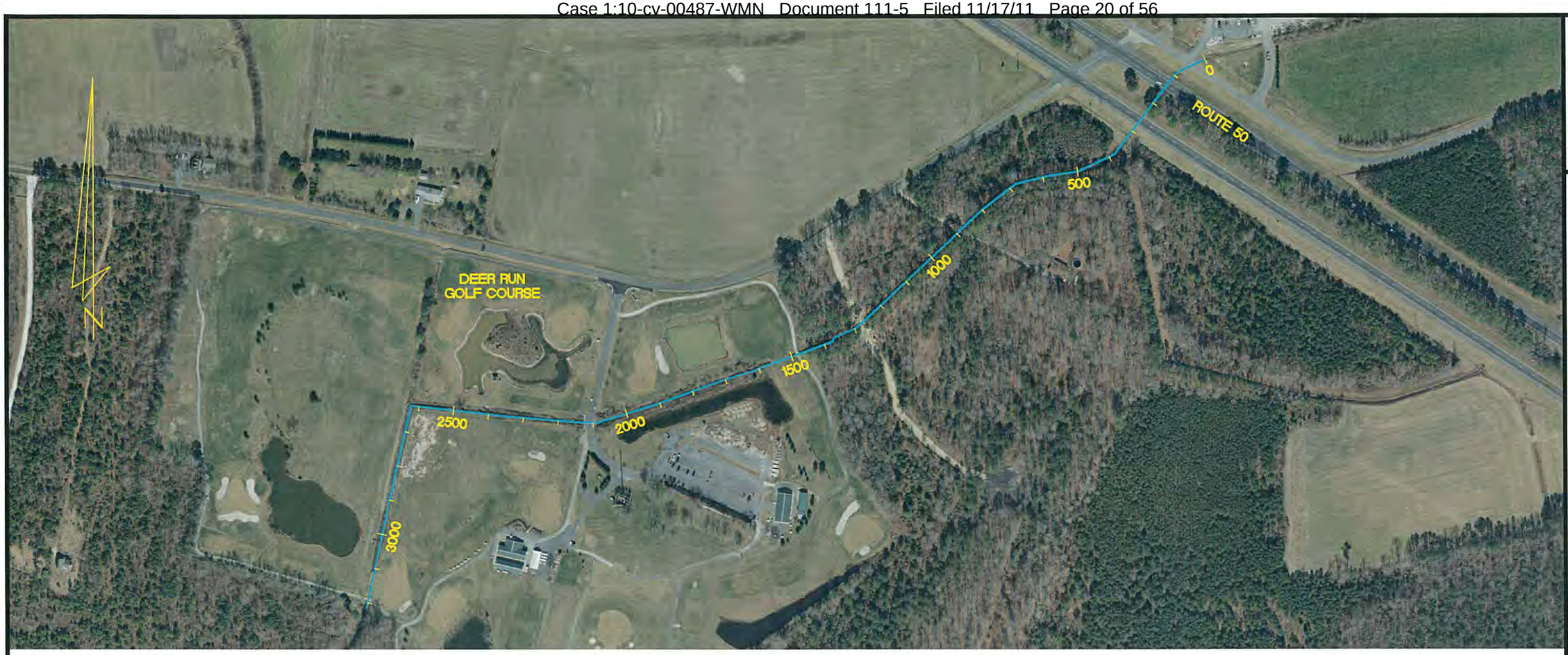
DRAWN BY DFS
SCALE 1"=200'
DATE 4/8/11
JOB NO.
FOLDER

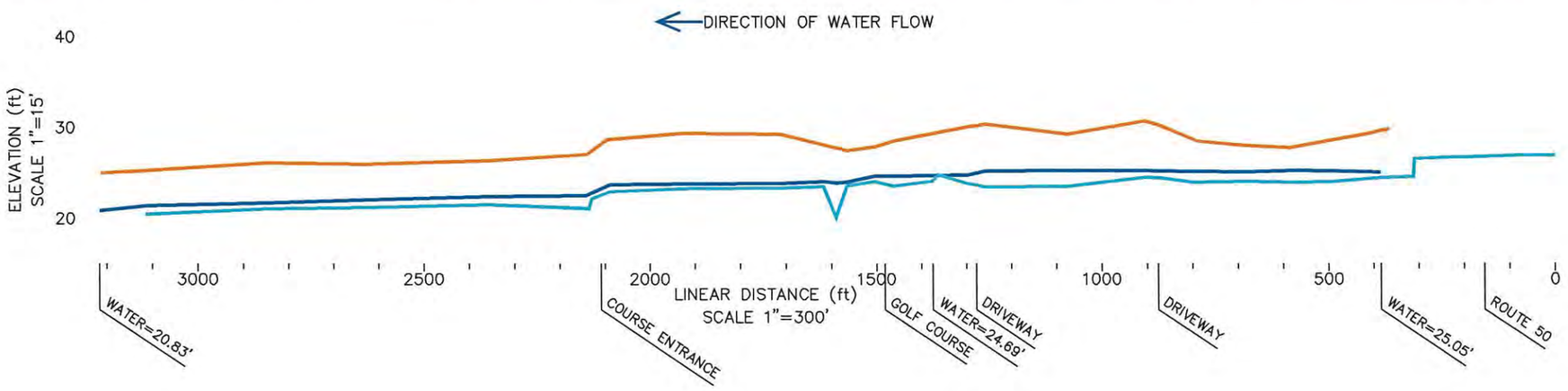
MICHAEL SCOTT INC.
207 MAPLE AVENUE CHESTERTOWN, MD 21620 (410)778-2310

WATER LEVEL ELEVATIONS
ALONG
FRANKLIN BRANCH
WORCESTER COUNTY
PLAN #3

Attachment 2

EXHIBIT 681





DRAWN BY DFS
SCALE 1"=300'
DATE 4/8/11
JOB NO.
FOLDER

MICHAEL SCOTT INC.
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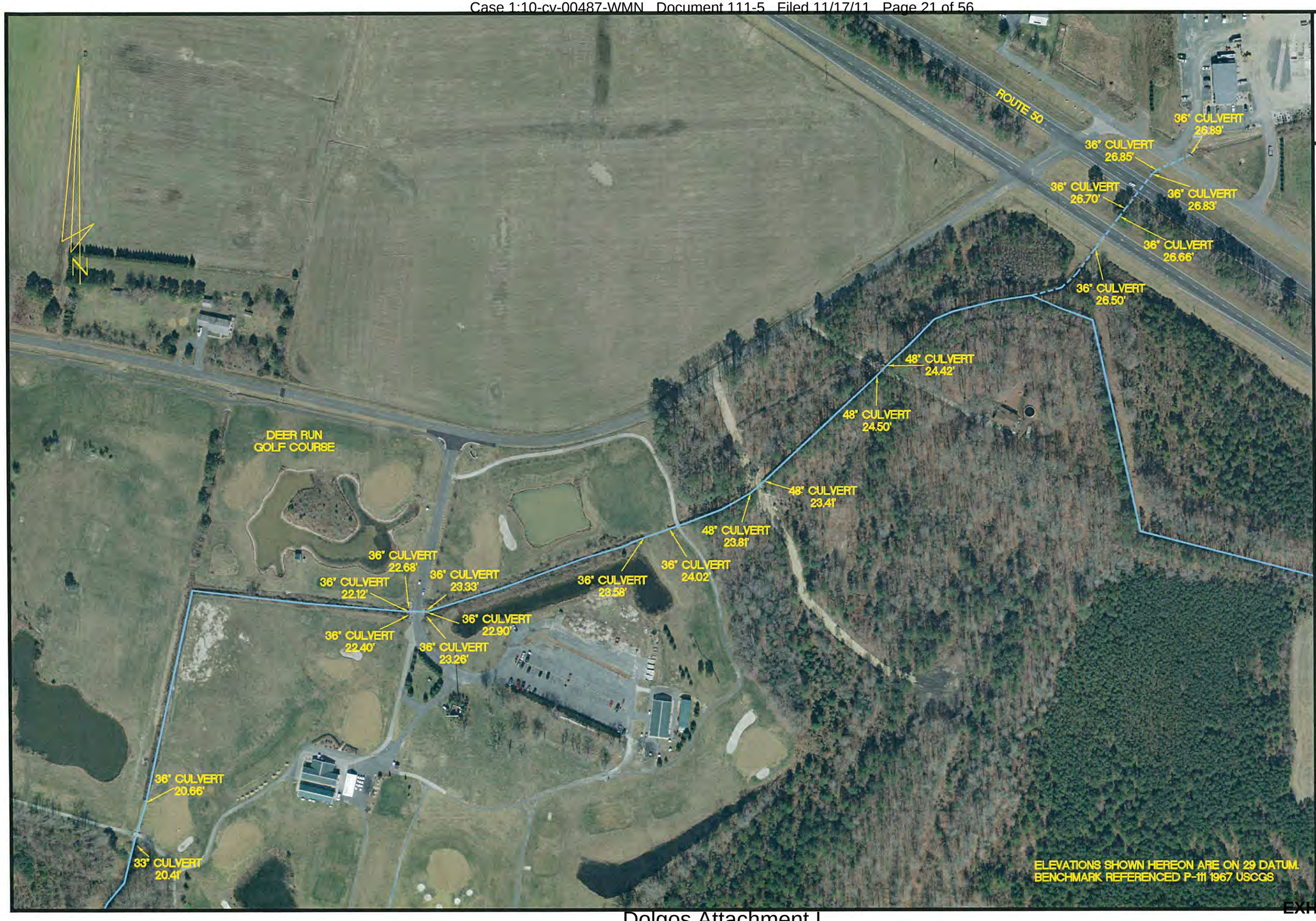
PROFILE ELEVATIONS
ALONG
FRANKLIN BRANCH
WORCESTER COUNTY
PLAN #4

Attachment 2

EXHIBIT 081



DRAWN BY DFS
SCALE 1"=200'
DATE 4/8/11
JOB NO.
FOLDER

MICHAEL SCOTT INC.
207 MAPLE AVENUE CHESTERTOWN, MD 21620 (410)778-2310

CULVERT INVERT ELEVATIONS
ALONG
FRANKLIN BRANCH
WORCESTER COUNTY
PLAN #2

EXHIBIT 681


Rayne's
SAND & GRAVEL INC


TriMax

DOLGOS000035

EXHIBIT 081